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Conference
on Trade and
Development

# REPORT OF THE EXPERT MEETING ON POSSIBLE TRADE AND INVESTMENT IMPACTS OF ENVIRONMENTAL MANAGEMENT STANDARDS, PARTICULARLY THE ISO 14000 SERIES, ON DEVELOPING COUNTRIES, AND OPPORTUNITIES AND NEEDS IN THIS CONTEXT

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# I. RECOMMENDATIONS ADOPTED BY THE EXPERT MEETING

The Expert Meeting on "Possible trade and investment impacts of environmental management standards, particularly the ISO 14000 series, on developing countries and opportunities and need in this context", which met in Geneva from 29 to 31 October 1997, focused its work on an examination of international standards for environmental management systems (EMS), particularly the ISO 14001 standard and its trade and investment impacts on developing countries. At its closing meeting, on 31 October 1997, the Expert Meeting adopted the following recommendations on item 3 of its agenda:

1. Participants considered that EMS standards could be a useful tool to enhance the environmental performance of an organization, as well as to reduce costs through a more efficient use of resources. The experts noted, however, that the ISO 14001 standard had been adopted only recently (September 1996) and that more analysis and experience was needed to understand its implications fully. There is also a need to share experiences with developing countries, particularly those where there is still a general lack of awareness and understanding of the ISO 14000 standards.

2. Experts recommended that there should be complementarity between voluntary standards on EMS and regulatory measures. There was a consensus that the ISO 14001 standard should not become mandatory.

3. The experts recognized the important contribution that international standards in general can make to facilitate international trade and the development process of developing countries. They also recognized the importance of enhancing the representation and effective participation of developing countries in ISO's work in general, including in the build-up to the revision of ISO's EMS standards in 1999. This required financial and technical assistance, as well as better coordination at the national level between standardization bodies, the government and other stakeholders. It may also be appropriate for ISO to review its internal processes to facilitate a wider representation and the effective participation of developing countries.

4. Experts recognized that voluntary standards, including the ISO 14001 standard, can have implications for trade, particularly for developing country exports. While compliance with the ISO 14001 standard may enable certain companies to strengthen market positions, the standard could act as a barrier to trade for companies that find it difficult or costly to comply with the standard. In this regard, experts recommended that appropriate attention should be paid to national implementation issues as well as to international cooperation to facilitate EMS implementation in developing countries.

7. Pressures on developing country suppliers to demonstrate ISO 14001 certification could result in barriers to trade and/or detract from the environmental objectives of setting up an EMS. Companies in developed countries should establish a supportive cooperation with their suppliers in developing countries in the area of EMS implementation. Transnational corporations (TNCs) could play an important role in this regard.

8. Experts stressed that certification and accreditation should be fair and rigorous to safeguard the credibility of the ISO 14001 certificate. Developing countries should be assisted in developing the necessary infrastructure to allow conformity assessment, certification and accreditation. In doing so, they should follow the relevant international standards and guides. The Expert Meeting stressed the important role of international recognition. The need for internationally recognized certification and accreditation system was also stressed and the work of the Quality System Assessment and Recognition (QSAR) and the International Accreditation Forum (IAF) was highlighted in this respect. Developing countries should be assisted in identifying the possibilities of increasing their share in the domestic and external markets for certification bodies and consultants, including through South-South cooperation.

9. The Experts recognized that SMEs in both developed and developing countries may face significant constraints in setting up and maintaining an EMS. They stressed the need for positive incentives, including technical assistance. Experts also stressed the importance of cooperation between large firms and SMEs. Similarly, cooperation between SMEs, particularly those in the same sector and geographical area, could help to reduce the costs of EMS implementation.

10. Governments in developing countries face several policy choices in the context of EMS standards, such as whether to adopt a pilot project approach and whether to share part of the cost of EMS implementation with the private sector. Experts recognized that Governments could play an important role in providing an enabling environment for the implementation of EMS, particularly in developing countries, for example by promoting the creation of necessary infrastructure and legislation, as well as appropriate incentives.

11. Experts identified a number of needs of developing countries with regard to national implementation of the ISO 14001 standard. They recommended that actions aimed at facilitating EMS implementation in developing countries should focus on: (a) awareness-building among the concerned stakeholders; (b) identification of sources and dissemination of information; (c) creation of infrastructure, training auditors and consultants; (d) access to and transfer of environmentally sound technology; (e) assistance in developing and implementing related legislation; (f) support for participation in relevant forums and for sharing experiences with the implementation of EMS. The Experts also urged the need for special financial and technical assistance for LDCs in implementation of the ISO 14001 standard at their national levels.

10. Experts recommended that empirical analyses be carried out, including in UNCTAD, of the trade implications of ISO 14000 standards as well as on national implementation issues that may have a bearing on international trade.

## II. CHAIRMAN'S SUMMARY OF THE INFORMAL DISCUSSIONS

1. The Expert Meeting benefited from interventions made by the secretariats of the International Organization for Standardization (ISO) and its Technical Committee (TC) 207, as well as from expert panels on the following issues: (a) trade and investment effects of ISO 14000 standards; (b) implementation, certification and accreditation issues; (c) needs of small and medium-sized enterprises (SMEs); and (d) opportunities and needs of developing countries. Interventions in each of these sessions were followed by a lively debate.

### A. Introductory session

2. Presentations were made by representatives of the secretariats of ISO and TC 207. The subsequent discussions highlighted a number of issues.

*Participation of developing countries*

3. Developing countries should fully participate in the ISO standard-setting process and more should be done to achieve this end. The need for financial assistance to enable representatives of developing countries to participate in ISO meetings was emphasized by experts from these countries. An expert from a developing country suggested that regional coordination, as well as coordination among a core group of developing countries, could facilitate representation at ISO meetings. The need to have representation of national standards bodies and SMEs was stressed.

4. Views differed on the extent that developing countries had participated in meetings on ISO 14000. On the one hand, a view was expressed that representatives of a number of developing countries had participated in the ISO meetings and were committed to the drafting process. On the other hand, experts from developing countries pointed out that there had been low participation of these countries relative to the very large number of ISO meetings held. An expert from an African country emphasized the lack of awareness about ISO 14000 in his region. A representative of ISO stressed that the 14001 standard would be revised in 1999 and that all efforts would be made to involve all countries. Internet E-mail and web sites, as well as other modern communications could be used for advice and comments in the process, although some experts noted that developing countries still have very limited access to such means of communication.

*Usefulness and experience with ISO 14000 standards*

5. Discussion centred on ISO standards in relation to environmental management systems (EMS), ecolabelling and life cycle analysis (LCA) including process and production methods (PPMs).

6. There was consensus that ISO 14001 for environmental management systems can be useful in improving environmental performance of companies, and that it

can assist with facilitating trade, although it could become an obstacle to trade where companies could not meet a need for it. It was recognized that there was little experience with the implementation of ISO 14001 and very little empirical research on it.

7. Clarifications were given on the ISO 14000 standards, particularly on environmental management systems and eco-labelling. The voluntary nature of the ISO standards was mentioned, as were threshold levels for standards which could be achieved or exceeded, while governments retained their role in setting normative standards. The regulatory and voluntary sectors should be complementary to achieve policy and other objectives as well as overall cost effectiveness. A multi-stakeholder approach was mentioned.

## B. Trade and investment effects of ISO 14001 standard

*Reasons for companies to certify to ISO 14001*

8. The need to maintain and increase market share was viewed by many experts from developing countries as the main reason that companies certify to ISO 14001. For transnational corporations (TNCs) and large companies, this related to export markets whereas SMEs were more specifically concerned with domestic market share, including increased market opportunities as suppliers to TNCs. In addition, certification to ISO 14001 can be seen as demonstrating compliance with national environmental legislation.

*Deterrents to certification*

9. The high cost attached to certification was viewed as a significant deterrent, particularly for firms in developing countries and SMEs. However, some were of the view that the lack of technical expertise and manpower was a greater stumbling block for SMEs than certification costs. A lack of awareness of EMS and ISO 14001 is particularly prevalent in developing countries and SMEs. However, it was stated that greater awareness was demonstrated in export-oriented companies.

*Proliferation of certification bodies and the impact on the quality of certification*

10. Many noted the proliferation of certification bodies and there was concern that this would impact negatively on the quality of certification, particularly as some of these agencies were not officially accredited. Developing countries were concerned about the increasing presence of foreign certification bodies in their countries and stressed the need for training at the national level of environmentally competent certifiers.

*Trade and investment impacts*

11. Many shared the view that, as there had been little experience with the implementation of EMS, it was too early to assess the extent of trade and investment impacts of ISO 14001. The experts expressed some concern regarding the potential trade implications of ISO 14000, while recognizing that empirical evidence was necessary in this respect. It was also stressed that the use of the

ISO 14001 standard could lead to pressure on suppliers. However, some experts expected that new trading opportunities will be opened if companies have ISO 14001 certification.

12. It was felt that the inadequate participation of developing countries may have a direct link with certain adverse trade effects that may accompany the use of ISO 14001. The lack of international accreditation of local certification bodies in developing countries could also result in trade barriers. The importance of mutual recognition and equivalence was referred to by many in this regard. It was suggested that the notion of trade barriers in the context of EMS needed further definition.

13. In relation to investment, it was suggested that, by employing the same environmental criteria both in operations at home and investments abroad, TNCs could contribute to raising environmental management standards in host countries.

## C. Implementation, certification and accreditation issues

*Implementation of the ISO 14001 standard*

14. Overall, it was felt that the implementation of the ISO 14001 standard was only in its infancy. Some said countries with existing national EMS are still in the process of analysing the benefits of ISO 14001 as regards its impact on environmental performance of companies, while others were more concerned with the impact that ISO 14001 may have on market access opportunities for developing countries. While it was clearly stated that ISO standards are voluntary tools to be used in the marketplace, concerns were expressed that they may become de facto barriers to developing country exports.

15. The distinction between, on one hand, the accreditation bodies responsible for the formal recognition of a body or an individual as a competent certifier and, on the other hand, the certification body which audits and recognizes an entity as meeting a standard, such as ISO 14001, was highlighted. It was also highlighted that ISO 14001 certification assures that a company has a well-functioning environmental management system in which the company sets its own environmental objectives which, at a minimum, correspond with national environmental regulations. However, ISO 14001 certification by itself does not ensure continuous compliance with environmental legislation. The forthcoming revision of ISO 14001 would address deficiencies in statistics, accounting systems and information systems.

16. The role of the government was seen as important for the implementation of EMS, although setting standards and accreditation are matters for the private sector in many countries. There was a large convergence of views that the voluntary use of EMS and government regulations were complementary and that the wider use of EMS was not deregulation. While recognizing the potential of EMS to help reduce the environmental impacts of an organization's activities, several experts noted that their governments had not yet adopted a position towards ISO 14001, for example, in the context of public policy. There was consensus that the use of ISO 14001 should remain voluntary.

17. Public policy on disclosure could raise issues with private organizations. Another matter for governments was improper advertising in publicizing certification.

*Qualifications of auditors*

18. The need for properly qualified auditors, including those having environmental expertise, was stressed. A wide range of skills and knowledge is needed for auditing. For developing countries, it was felt that the difficulty lies in the lack of availability of competent trainers, the lack of available information on environment related issues, and the lack of expertise and qualified workers in locally owned firms in developing countries. Concern was expressed with respect to the conflict of interest which may arise in instances where a company offering auditing services is also involved in training, consultancy and even trading activities. It was suggested that a code of good conduct for the profession of auditor should be elaborated.

*Mutual recognition of certification*

19. Mutual recognition of certification bodies was needed to facilitate international trade. It was pointed out that mutual recognition should be based on criteria for certification bodies and accreditation systems. Mutual recognition was not about harmonization of implementation. A rationale for mutual recognition is that all certifying bodies concerned operate with the same 14000 standard. However, some were of the opinion that existing standards for certification bodies were insufficient as a basis for mutual recognition. Unethical certification was also a problem, although there were existing complaint procedures and rules of professional associations.

20. Some were concerned that unwillingness to engage in mutual recognition agreements may be based on a deliberate will to protect market shares. There was little empirical evidence of ISO 14001 certificates being rejected by clients in developed countries. Some experts expressed concern over the dominant presence of international certifiers in their domestic market.

21. It was suggested that the development and adoption of a worldwide accreditation logo, enabling national certifiers to be recognized worldwide, would provide the most appropriate solution.

22. Several experts highlighted the need for internationally recognized certification and accreditation system and referred to the work of the bodies of the Quality System Assessment Recognition (QSAR) and the International Accreditation Forum (IAF). Some delegations, however, were of the opinion that QSAR was not operational.

## C. Needs of small and medium-sized enterprises

*Reasons for SMEs certifying to ISO 14001*

23. Needs previously mentioned were elaborated, namely, to maintain and increase market share, demonstrate compliance with national environmental legislation and enhance corporate image. Some noted that SMEs were not

certifying according to ISO 14001 because of perceived savings and lower costs, but rather as a response to pressure from customers, in particular, large companies.

*Needs of SMEs*

24. It was noted that SMEs in both the developed and developing countries faced many similar difficulties with EMS and certifying to ISO 14001. The main constraint faced by SMEs was the high cost associated with implementing and maintaining an EMS. Apart from the financial costs, SMEs lacked the necessary technical expertise and experience as well as human resources and management time. In addition, there was a lack of awareness about EMS and ISO 14001. Often SMEs did not have access to the necessary information, in particular the micro-enterprises, and lacked resources to participate in meetings related to the formulation of standards. As such, some felt that the needs of SMEs may not be adequately taken into account in the formulation of ISO standards. Some felt that it would be counterproductive to develop a separate standard for SMEs, as this would be discriminatory. It may be more appropriate to have a single standard but at the same time introduce national support systems to assist the SMEs. Some experts questioned the need and usefulness of environmental management standards for micro - and small enterprises.

25. The main difficulties faced by SMEs in implementing an EMS relate to lack of awareness of environmental issues, the initial environmental assessment, devising appropriate policies and programmes to implement the EMS, the actual implementation of the EMS, and problems related to environmental auditing.

26. It was noted that pressures on SMEs to introduce managerial procedures to obtain ISO 14001 certification could detract from the environmental objectives of setting up an EMS.

*Addressing the needs of SMEs*

27. Although there are existing channels for promoting information flows to SMEs, such as using national chambers of commerce as focal points and relying on modern communication tools, it was recognized that these may be inadequate for SMEs in developing countries. Thus, there is a need to devise additional means to improve communication flows to these SMEs.

28. It was noted that there should be increased cooperation between the public and private sectors. Also, SMEs in developing countries could benefit from the experience of SMEs in developed countries. Partnerships between SMEs in developing countries could be encouraged as well. It was also suggested that TNCs could act as mentors in assisting SMEs as well as in providing additional financial resources for the participation of SMEs in the development of international standards.

## D. Needs of Developing Countries

29. The principal policy choices faced by governments of developing countries in the context of EMS standards include deciding whether to adopt the standards as voluntary national standards and whether industry should be assisted in implementing EMS.

30. The main needs of developing countries with respect to EMS and ISO 14001 include assistance in awareness building, access to information, access to and transfer of environmentally sound technologies, technical and financial support for participation in the development of international standards, infrastructure requirements including through assistance in the development and implementation of related legislation, the training of local auditors and consultants, sharing experiences on implementing EMS, and support for SMEs.

31. Although some felt that it may be premature to assess the possible trade impacts of ISO 14001, it was suggested that international organizations such as UNCTAD could assist developing countries through providing technical assistance and conducting empirical analysis on the possible trade and investment impacts of ISO 14000 standards. It was further suggested that the participation of developing countries in the development of ISO standards could be significantly enhanced through the regional representation of developing countries. These countries could work closely with international organizations such as UNCTAD. It was further suggested that governments could provide incentives to encourage the wider use of EMS. Some suggested that mutual recognition agreements and memoranda of understanding could be the best form of cooperation between importing and exporting countries.

## E. Conclusions

32. The implementation of environmental management standards is rapidly growing. Their possible trade and investment impacts are a matter of concern for developing countries as barriers to trade may arise, especially for SMEs. Implementation of EMS is also a matter of concern because of the costs involved. On the other hand, environmental management standards may greatly contribute to establishing fair operational practices in the globalization of trade, and they may offer potential advantages for many countries, especially developing countries, to enter markets.

33. Environmental management standards, however, do not guarantee, by themselves, improvements in environmental performance of production and/or of products, but they assure only compliance to an adopted EMS and to a declared environmental policy that fulfills, at a minimum, national regulations. This implies that competition in markets may depend much less on the adoption of an EMS through the ISO 14000 series, and more on the environmental goals set in the environmental policy statement. This relates closely to the requirement in the ISO standard to continuously improve their environmental performance. This

requirement, which derives from the precautionary principle as stated in Agenda 21, commits producers to a level of environmental performance well beyond national standards (also standards in voluntary agreements) in order to contribute effectively to the process leading to sustainability.

34. Transparency, participation and consensus are vital elements for the implementation of such a process among countries and within them. The adoption of ISO 14000 is a promising instrument to establish a common basis and to fill the existing gaps that marginalize developing countries and SMEs.

35. UNCTAD might support those with the most difficulties in becoming duly informed, especially developing countries and SMEs, about the main targets in designing a strategy to achieve sustainability. Joint initiatives with other organizations engaged in the field, such as the United Nations Environment programme (UNEP), the Organization for Economic and Development (OECD), ISO and non-governmental organizations (NGOs), might accelerate this critical process. Other organizations interested in the process, such as governments, trade unions, industrial sectors, TNCs and other NGOs, should contribute and cooperate with each other to disseminate, as widely and as homogenously as possible, basic information on EMS in order to guarantee a common ground for achieving the opportunities for a fair development of worldwide trade and avoid negative effects that may arise from an inadequate implementation of EMS in developing countries.

## III. ORGANIZATIONAL MATTERS

### A. Convening of the Expert Meeting

1. In accordance with the agreed conclusions adopted by the Commission on Trade in Goods and Services, and Commodities at the second part of its first session (19-21 February 1997), the Expert Meeting on Possible Trade and Investment Impacts of Environmental Management Standards, and Opportunities and Needs in this context, particularly the ISO 14000 Series, on Developing Countries was held at the Palais des Nations, Geneva, from 29 to 31 October 1997. The meeting was opened on 29 October 1997 by Mr. J.C. Saigal, Senior Programme Manager of the Division of International Trade in Goods and Services, and Commodities (DITC).

### B. Election of officers

(Agenda item 1)

2. At its opening meeting, the Expert Meeting elected the following officers to serve on its Bureau.

Chairman: Mr. Giovanni Mastino (Italy)

Vice-Chairman-cum-Rapporteur: Mr. Gene A. Hutchinson (Trinidad and Tobago)

### C. Adoption of the agenda

3. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in TD/B/COM.1/EM.4/1. Accordingly, the agenda for the meeting was as follows:

1. Election of officers

2. Adoption of the agenda

3. Possible trade and investment impacts of Environmental Management Standards, particularly the ISO 14000 Series, on Developing Countries, and opportunities and Needs in this context

4. Adoption of the report.

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/ Report of the Commission on Trade in Goods and Services, and Commodities on its first session (TD/B/44/5 - TD/B/COM.1/6), annex I, part B, para. 3(b).

D. Documentation

4. For its consideration of the substantive agenda item (item 3), the Expert Meeting had before it a background paper by the UNCTAD secretariat entitled "Environmental Management Guidelines particularly for the Least Developed: Trade and Investment Impacts in Developing Countries" (TD/B/COM.2/EM.4/2).

E. Adoption of the report

5. At its [illegible] meeting, on 31 October 1997, the Expert Meeting adopted its final recommendation (see section II above), agreed to incorporate the Chairman's summary into the report (see section III above) and authorized the Rapporteur to prepare the final report of the meeting, under the authority of the Chairman.

ANNEX

ATTENDANCE*/

1. Experts from the following States members of UNCTAD attended the meeting:

Argentina
Australia
Bahrain
Bangladesh
Belarus
Bolivia
Brazil
Canada
Chad
China
Colombia
Costa Rica
Czech Republic
Ecuador
Egypt
Estonia
Ethiopia
Gabon
Germany
Ghana
Guinea
Haiti
Honduras
India
Indonesia
Iran (Islamic Republic of)
Italy
Jamaica
Japan
Jordan
Kenya
Lithuania
Luxembourg
Madagascar
Mali
Mauritius
Mexico
Morocco
New Zealand
Nigeria
Pakistan
Paraguay
Peru
Philippines
Poland
Republic of Korea
Saudi Arabia
Singapore
South Africa
Spain
Sri Lanka
Sudan
Thailand
Trinidad and Tobago
Tunisia
Turkey
Ukraine
United Kingdom of Great Britain and Northern Ireland
United States of America
Uruguay
Venezuela
Zambia

2. The Department of Development Support and Management Services, the Economic Commission for Europe, the Economic and Social Commission for Western Asia and the United Nations Environment Programme were represented at the meeting. The International Trade Centre UNCTAD/WTO was also represented at the meeting.

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*/ For the list of participants, see TD/B/COM.1/EM.4/INF.1

3. The following specialized agencies and related organization were represented at the meeting:

World Health Organization
International Monetary Fund

The World Trade Organization was also represented at the meeting.

4. The following intergovernmental organizations were represented at the meeting:

Andean Development Corporation
Arab Labour Organization
European Community
Inter-American Development Bank
Latin American Economic System
Organisation for Economic Co-operation and Development

5. The following non-governmental organizations were represented at the meeting:

General Category:

International Organization for Standardization
World Federation of United Nations Associations
World Wide Fund for Nature International

Special Category

International Union for Conservation of Nature and Natural Resources

6. The following organization, specially invited by the secretariat, attended the meeting:

World Business Council for Sustainable Development

## PANELLISTS

The Operation of EMS Standard, in particular the ISO 14010 series

Mr. C.J. FAVRE, Assistant Secretary-General, ISO, Geneva, Switzerland
Mr. A. HUSSEINI, Manager, Environmental Programme, Canadian Standards Association, Ontario, Canada

Trade and Investment Effects of EMS Standards

Mr. G. DODDS, Chairman, ISO, United Kingdom
Ms. J. HILLARD, Consumers' Association of Canada
Mr.Chan KEAN, Head, Asian Environmental Office, Sony International (Singapore) Ltd.
Mr. K.P. NYATI, Head , Environment Management Division, Confederation of Indian Industry, New Delhi, India
Mr. R. PEACOCK, Deputy Director, Resource LTD for UNIDO, Vienna, Austria

Implementation, Certification and Accrediation Issues

Mr. Guido PEROLLA, Division for the Certification of Systems INMETRO/DINPQ, Rio de Janeiro, Brazil
Mr. H.C.W. SUNDLACH, Chairman, International Accreditation Forum (IAF), General Manager, Dutch Council for Accreditation (RVA), Netherlands
Mr. A.A. LONG, Manager, Environmental System Certification, SIRIM QAS Sdn. Bhd., Sham Alam, Malaysia
Ms. M. McKIEL, Environmental Protection Agency (EPA), Washington, D.C., United States
Mr. Johan PIET, Chairman, Environmental Task Force, Federation of European Accountants (FEE), Brussels, Belgium, Environmental Accountant, Deloitte and Touche, Netherlands

Needs of Small and Medium-sized Enterprises

Ms. N. BENNET, United Nations Environmental Programmme, Paris, France
Ms. Ruth HILLARY, Center for Environmental Technology, Imperial College of Science, Technology and Medicine, London, United Kingdom
Mr. F. IRALDO, Institute for Energy and Environmental Economics (IEFE), Bocconi University, Milan, Italy
Mr. J.A.A.F. PINTO de ABREU, Technical Director, Brasilian Association for Technical Standards, Rio de Janeiro, Brazil
Mr. J.L. TEJERA, Director, Environment Division, Asociación Española de Normalización (AENOR), Madrid, Spain

Opportunities and Needs of Developing Countries

Mr. G. HUTCHINSON, Chairman, DEVCO, Regional Liaison Officer for the Caribbean and Central America, Director, Trinidad and Tobago Bureau of Standards, Trinidad and Tobago
Ms. Claudia SOM, Programme Manager, Colombian Project, Federal Laboratories for Material Testing and Research, St. Gallen, Switzerland